



EH&S Reporting Activities for June 2004

➤ Key Activities

- As of June 30th, there have been **16** days without a lost-time injury. There were two recordable injuries in June. A Facilities Management subcontract janitorial worker had a June 14th recordable arm injury (one lost workday) while transferring trash to a container near CEBAF Center. Also a Physics Division technician had a June 28th hand injury in Hall B.
- A draft JLab response for the FY 2004 DOE ES&H Liability data call was generated at the request of the Chief Financial Officer. The seven remaining open findings from the August 2003 Federal OSHA review were included; the estimated cost for closing these is \$99k.
- EH&S Reporting provided technical assistance to DOE Headquarters Office of Environment, Safety, & Health (EH) support staff at DOE Site Office request. The technical assistance was in support of the biweekly DOE-wide EH publication, Operating Experience Summary (OES). EH plans to do an article in an upcoming OES issue on the May 2004 Vertical Test Area unauthorized safety interlock modification. The event was reported in May as a violation of the DOE worker radiation protection rulemaking, 10 CFR 835.
- The JLab Environmental Management System (EMS) Implementation Team made considerable progress towards completing the first major EMS implementation step in June. The three sub-teams have been actively reviewing JLab activities and facility operations to identify the ways that each process interacts with the environment. This identification activity was at least 80% complete at the end of June.

➤ Other Activities

- EH&S Reporting and DOE Site Office staff participated in a June 14th videoconference on the Alcoa corporate safety program. The Alcoa safety presentation outlined the firm's progress in safety and health since the late 1980s. Former Treasury Secretary Paul O'Neil became Alcoa CEO in 1987 and changed the Alcoa corporate culture to a safety first culture.
- An EH quality assurance alert on counterfeit items was distributed. The items were reportedly being distributed by terrorist-related organizations.

- **Work Smart Standards (WSS) Set**

- EH&S Reporting continued working with the Policy and Manuals staff to incorporate a review of WSS Set items along with EH&S Manual updates. This may be accomplished through an on-line system that is currently under development.
- Proposed changes to EH&S Manual Chapter 2420 are being processed.
- A new ANSI standard related to Lock, Tag & Try is being considered for addition to the Set.

- **National Environmental Policy Act (NEPA)**

- The start of preparation of the CEBAF and FEL Upgrade Environmental Assessment (EA) is awaiting notice from DOE.
- EH&S Reporting is working with other Lab staff to address other NEPA items, including actions related to the new retention pond planned to be constructed later this year.

- **Storm Water Permit Items**

- Construction Activity under Permit VAR 103277
 - An application for the new permit to cover the Phase 1 CEBAF Center Addition and new retention pond was provided in June.
 - The Permit and Working Draft of the Storm Water Pollution Prevention Plan (SWP3) are accessible on the jlab.org/ehs web page.
- Best Management Practices under Permit VAR 040079
 - EH&S Manual Chapter 6733 is being revised to document a site Storm Water Management Program, which will address permit and regulatory requirements.
 - The report for Year 1 progress was provided to the DEQ in June. The report identified that a number of the Best Management Practices and measurable goals were being adjusted to better fit Lab needs for this next permit year.

- **Environmental Management System (EMS)**

- The consultant provided the final report on the initial gap analysis and a proposed EMS implementation plan for possible Lab use.
- The EMS Implementation Team and backups focused on reviewing all Lab processes and identifying the tracking system to be used to record the many ways that the Lab interacts with the environment.
- As identified this month, an on-line tracking system is being developed and will be ready for data entry in July.

EH&S Policies & Manual Group Highlights

June 2004

► Policies & Manual Group Initiatives

- ✓ Progress on the EH&S Tracking System PMG module development was delayed so that my student intern could assist in the development of an online tracking tool for the Environmental Management Systems (EMS) initiative. We plan to pick up again with the module development in mid-July.
- ✓ The PMG, in coordination with the EH&ST3 Group, is sponsoring a high school student intern, Alendria Prioleau. Ria is working on extracting all supervisory responsibilities from the EH&S Manual and placing them into a database. She has also correlated each responsibility to the relevant ISMS Core Function and Principle. There won't be enough time on her internship to complete an interactive form in MS Excel for this data that was the original focus of her project. She is working now to complete training materials for supervisory toolbox responsibilities training. I have also sent a request to SLAC for a copy of their EH&S supervisory training module to use as a benchmark.

► EH&S Manual Updates

- ✓ Director's Council package returned with approval. Chapter 1200, *Purpose, Scope, and Use of the JLab EH&S Manual*, w/ Appendix 1200-T1 & Appendix 1200-T2, and Chapter 6680, *Lead Handling*, w/Appendix 6680-T1 have been uploaded to the online EH&S Manual.
- ✓ Chapter 2220, *Landlord and Tenant Responsibilities*, had minor changes from the author that were posted online and inserted in the paper versions of the EH&S Manual. No formal review was necessary. Triennial review is complete.
- ✓ Chapter 2410 *Applicable Regulations and Contractual Commitments* – the Level 2 review is complete, no comments received.
- ✓ Chapter 3310, *Standard Operating Procedures and Operational Safety Procedures* - Level 3 review document is under preparation. Main change to the chapter was to establish a required time limit for periodic review of SOPs/OSPs at every 3 years. This number was chosen to simulate the review frequency for EH&S Manual chapters/appendices, which is triennial.
- ✓ Chapter 5200, *Incident Investigation* - Level 3 review complete, received mark up of reconciled comments from author. We are preparing the Level 4 copy for Director's Council (DC) review.
- ✓ Chapter 5300, *Occurrence Reporting*, is ready for Level 4 – DC review. We are holding the chapter for a week in hopes of adding one or two other chapters to the DC review package. See [PMG-2004-57-01](#).
- ✓ Chapter 6140, *Cranes & Hoists*, was distributed for Level 2 review. Received a request to extract technical info from the chapter and place it in a handbook. I sent this request on to the author for consideration.

EH&S Policies & Manual Group Highlights

June 2004

- ✓ Chapter 6210, *General Electrical Safety*, and Appendices 6210-T1 received minor changes that did not require DC review/approval.
- ✓ Technical Appendix 6210-T2, *Extension Cord Safety* - John Kelly submitted this appendix for a Level 4 review. However, Bill Vulcan brought the appendix to the June 26, 2004 Electrical Safety Subcommittee (ESS) meeting for discussion of several changes. These included generally making the appendix shorter by deleting lengthy explicit details and removing some of the pictures. John pulled the appendix from the next DC package. The ESS members were asked to forward any comments to John for consideration. See [PMG-2004-56-01](#).
- ✓ Chapter 6220, *AC Electrical Power Distribution Safety*, completed Level 3 review. Comments have been forwarded to author.
- ✓ Chapter 6240, *Electrical Equipment Construction* - the ESS reports that the chapter is ready for submittal to Christina, however no feedback was given to my request to assess whether or not to include the relevant elements of the pump cart safety notice that was distributed last year in response to the August 2003 electrical shock event. In the interest of time, I've decided to continue processing the chapter for Level 2 review. I will resubmit my request to the ESS re: pump cart construction in the Level 2 comments. See [PMG-2004-07-01](#).
- ✓ Chapter 6420, *RF and Microwave Radiation*, completed level 3C review. Comments were compiled and forwarded to author.
- ✓ Chapter 6732, *Oil Spill Prevention Control and Countermeasures* – author has given approval for Level 2 review once changes from last mark-up are incorporated.
- ✓ Chapter 6630, *Respiratory Protection* - Level 2 review complete. We are compiling the comments. [PMG-2004-50-01](#)
- ✓ Chapters 6810, 6820, and 6830 being reviewed by Medical Services authors to determine if changes are necessary and extent of any changes.
- ✓ The RadCon Manual Supplement completed Level 2 review. No comments were received. Refer to [PMG-2004-55-01](#).
- **EH&S Manual Revision Status – Color Coded Table**
 - ✓ The color coded table of EH&S Manual chapters and appendices (dated July 8, 2004) can be viewed at:
http://docushare.jlab.org/Get/File-8112/Color_coded_table-4-29-04.xls.
- **Issues/Concerns**
 - ✓ Facilities Management Director submitted a concern about Chapter 3330 regarding cross-divisional stop work situations. The chapter does not give clear

EH&S Policies & Manual Group Highlights

June 2004

- guidance as to who becomes the owning organizational element with authority to approve restart of the work. Rusty and I reviewed the procedural guidance in the chapter and applied it to a recent stop work event. We decided that the chapter may require only a few wording changes to clarify organizational ownership. We also felt the guidance needed to be consistent with guidance in Chapter 2220 given to building managers, landlords, and tenants. Rusty will send me some language for suggested changes to Chapter 3330 after he has had an opportunity to familiarize himself with the guidance in the two chapters (2220 & 3330). Rusty also raised a concern about the inconsistency in the stop work information given during EH&S Orientation training. I will submit a change to the training, which I believe will be undergoing a revamping soon, after Chapter 3330 has been updated.
- ✓ PMG activities experienced a backlog during June for several reasons including EMS priorities, the PMG Manager's participation at the US Particle Accelerator School (USPAS), and personnel absences due to non work-related injury and illness. We are working diligently on getting back on track.

Accelerator Division EH&S Summary – May 2004

External Regulations

- T3 - Provided the EMS Management Representative, Mary Erwin, an overview of the EH&S Tracking System. Discussed possible adaptation of the system design for supporting EMS tracking requirements. T3 assigned as a team member to the EMS Implementation team and performed some benchmarking on EMS programs developed by BNL, SLAC, and EPA. Reviewed DOE EH-41 guidance documents on building an EMS program using information gathered from other DOE initiatives like ISMS and WSS. Submitted a proposal to the EMS Team Leader.

Training

- IS - 3 people trained on forklifts on 5/13/04 and 5/17/04. Two Test Lab staff trained on crane #2 operations on 5/18/04.
- ODH training has been upgraded and is on-line, JLab specific, but has updated pictures and videos. ODH for roofing crew: May 3rd, 4th subcontractors, May 4th, 2004, 2 users. Taught lead worker training to Hall A employee.
- RAD conducted RCT bi-weekly training on new Sealed Source and Radioactive Compressed Gas Inventory and Control procedure and trained RCG on proper steps to take upon discovery of problem with PSS (or RCG controlled shielding).

Tracking System

- Office of Assessment has gotten complaints from Physics Division staff about the auto email notices they are receiving from their Independent Assessment (IA) recommendations. OA intends to continue using the EH&S Tracking System to track IA open items but requested assistance from T3 to address the Physics Division concerns. T3 assisted Mary Jo Bailey with the posting of Office of Assessment (OA) independent assessments by posting the assessment reports in Docushare and inputting the report link to each event record. I created a folder for in the EH&S section of Docushare for OA storage of the reports and presented JEHSC an overview of changes to home page that support the DOE and JLab Lessons Learned initiatives.

Task Hazard Analysis and Technical Work Documents, Hazard Mitigation (IS/IH/RAD)

TEST LAB

- Clean Room “Elevated Industrial Work Platform” with John Mammosser, Engineering and Purchasing so we could prepare to put the design and fabrication out for bid.
- IS - Eric and Ned met with Tim Whitlatch and John Heckman to do a preliminary hazard analysis of the proposed steam-cleaning project. We identified several hazards and discussed their mitigations.
- IH - Met with John Hogan, Joe Preble, and Tom Elliott: Indium seal work in the R&D Chemroom: Work to improve the wetting capability of the seals on the warm window will require the use of cyanide in the Chem Room. Limited quantities will be purchased, and the work will follow a TOSP.
- IH - Prepared Facilities Management staff for mold cleanup in Test Lab. Provided respirator training, cleaning solution, HEPA vacuum, and PPE for cleanup work which included removing contaminated ceiling tiles, pipe insulation, HEPA vacuuming and washing walls. Cleanup work was conducted based on recommendations made by the IH Group following mold sampling requested by Test Lab Building Manager.
- IH - Acid Transfer Building: Sludge build up in acid rinsewater tank (15+ years worth) is now at the level where it interferes with pumping. The sludge will be characterized and then pumped out. It will surely be disposed of as hazardous waste. The two acid neutralization tanks associated with the R&D Chemroom will also have sludge layer removed.
- IH - Sampled Test Lab extension stairwell for mold. This is clearance sampling after an outside contractor cleaned and removed contaminated surfaces in the stairwell. Results, NO STACHYBOTRIS and mold counts below control sample taken outdoors. The stairwell has been opened for use!

Accelerator Division EH & S Highlights
May 2004

- SSG - During the unscheduled VTA shutdown, the new VTA radiation monitoring system was commissioned.
- IH - Improved safety goggles for chemistry areas: new goggles are fog-free and have an optional insert for prescription lenses. Goggles are being distributed to production chem. user for evaluation.

CEBAF

- IS - Ned met with Ron Lauze to discuss the implementation of a Pre Shutdown Safety Awareness Training "On Line Course"
- IS - Eric and Steve Suhring met with FM representatives to review re-roofing work.
- IS - Eric and Ned attended Eng. Group Leaders meeting. Offered assistance in developing a THA / WCD for the removal and replacement of the charcoal purifying media.
- SSG - Hazard analysis for MCC work continuing. PPE such as cut resistant gloves are being purchased as hazards are identified.
- SSG - Prototype barometrically compensated ODH monitor re-installed in the injector to get field experience with this combination of sensor and head end electronics manufacturers.
- SSG - MCC upgrade equipment for the PSS system is on order. Some material received this week.
- SSG - Software that can read and write to the ODH monitoring system is under alpha test. This will allow automatic determination of bypassed heads. Manual process now in use is error prone.
- SSG - Some of the MCC upgrade equipment has been received.
- T3 - Attended Engineering Department's downtime planning meeting. Noted a potential waste disposal issue associated with CHL's charcoal filter replacement. Absorbent is a ground coconut shell base that has been saturated with oil. Eric and Ned will assist Dana with a task hazard analysis. I gave Steve a heads up about the potential waste.

FEL

- IS - Ned met with Neil Wilson to discuss bringing a mobile crane on site and removing the shielding blocks at the FEL vault roll up door.
- IH consideration of note: The users of the existing lab 3 are conducting the experiment involving carbon nanotubes. As part of their procedure, respirators are required when handling the nanotubes. The potential for exposure, however, has not been characterized. IH will perform air sampling to characterize exposure when the experiment resumes this summer.

GENERAL

- IH group supervised confined space entry at the Residence Facility for sewage transfer station pump replacement.
- IH - Reviewed Safety Orientation presentation put together by Amy Wilkerson of William and Mary. The orientation will be given to all new W&M staff. Very nice job, only recommendation was to provide information on what to do, who to notify, etc., in the event of an injury.
- IH - Met with Steve Gagnon to review the safety orientation that is given to the summer students. The only major change was to ensure that all students know that they must be trained on the hazards of any chemicals they will work with, and that training must come from the supervisor. Steve goes over a sample MSDS in the training. Also suggested that Steve and company remind all mentors of the hazard communication training responsibility, keeping in mind that some items, like solder, may not be thought of as chemicals; therefore it is important to think about intended use, such as grinding, heating, etc and resulting potential exposure to chemicals.
- T3 - Distributed posters on DOE Electrical Safety Month to accelerator site areas in B85, 87, 89, and FEL and I gave one copy to E. Martin for the Electrical Safety Subcommittee.
- IH - New Satellite Accumulation Area added to the Test Lab in the 1MW klystron area for lead contaminated water. The SAA in this area that consists of a 15-gallon drum with all appropriate signage.
- IH - Checked out HEPA vacuum to Michael Morrone to cut G-10 on band saw in Bldg. 59. IH also took measurements with the air velocity meter to ensure a minimum of 100 fpm at the cutting surface. All measurements were above 150 fpm.